## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A process for an asymmetric intramolecular [3+2] cycloaddition reaction of a hydrazone characterized by which comprises reacting a hydrazone derivative represented by the following formula (III):

[[(]]wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are each identical or different and denote a hydrogen atom or a hydrocarbon group which may have a substituent or a hetero atom, R<sup>1</sup> and R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> may be linked to form a ring by a hydrocarbon chain which may have a substituent or a hydrocarbon chain which has a hetero atom, and X denotes a hetero atom or a hydrocarbon chain which may have a substituent or a hetero atom[[)]], in the presence of an asymmetric catalyst system obtained by mixing a zirconium alkoxide represented by the following formula (I):

$$Zr(OR)_4$$
 (I)

[[(]]wherein R is a hydrocarbon group which may have a substituent[[)]] with a binaphthol derivative represented by the following formula (II):

$$Y^2$$
 $OH$ 
 $OH$ 
 $Y^2$ 
 $Y^1$ 
 $Y^2$ 
 $Y^1$ 
 $Y^2$ 
 $Y^1$ 
 $Y^2$ 
 $Y^1$ 
 $Y^2$ 
 $Y^1$ 

<u>and</u>

[[(]]wherein  $Y^1$  and  $Y^2$  are each identical or different and denote a hydrogen atom or a halogen atom, and at least one of  $Y^1$  and  $Y^2$  denotes a halogen atom[[)], to produce a cycloaddition reaction product.

2. (**Original**) The process for an asymmetric intramolecular [3+2] cycloaddition reaction according to claim 1, which is carried out in the coexistence of a primary alcohol.

- 3. (**Original**) The process for an asymmetric intramolecular [3+2] cycloaddition reaction according to claim 2, wherein the primary alcohol is an n-propanol.
- 4. (**Previously Presented**) The process for an asymmetric intramolecular [3+2] cycloaddition reaction according to claim 1, by which an asymmetric cyclic compound represented by the following formula (IV):

$$R^4$$
 $H$ 
 $H$ 
 $N$ 
 $R^5$ 
 $(IV)$ 

is synthesized.

5. (**Previously Presented**) The process for an asymmetric intramolecular [3+2] cycloaddition reaction according to claim 1, wherein the zirconium alkoxide used in the catalyst system is  $Zr(O^tBu)_4$  or  $Zr(OPr)_4$ .